

T3T4:OS5.2

**Gender and dieting modify the association between emotional eating and weight status***Péneau SP<sup>1</sup>, Ménard EM<sup>1</sup>, Méjean CM<sup>1</sup>, Bellisle FB<sup>1</sup>, Hercberg SH<sup>1,2,3</sup>*

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**Introduction:** Unlike other psychological correlates of weight status, such as cognitive restraint and disinhibition, emotional eating (EmE) has received relatively limited attention in the literature. We aimed at examining the association between EmE score and nutritional status, and the influence of gender and dieting on this association.

**Methods:** A total of 8,580 men and 27,061 women aged  $\geq 18$  years participating in the NutriNet-Santé cohort study were selected in this cross-sectional analysis. Self-reported weight and height, EmE scores of Three-Factor Eating Questionnaire Revised 21-item version (TFEQ-R21), and dieting status data were collected. The relationship between EmE and weight status was estimated using multiple linear and logistic regression models adjusted for socio-demographic and lifestyle factors. Interactions of EmE with gender and dieting history were assessed.

**Results:** Median EmE scores in women were 33, 50, and 61 in never, former and current dieters, respectively, while in men they were 17, 33, and 39, respectively. Strong associations appeared between EmE score and nutritional status in most categories of gender  $\times$  dieting status. The strongest associations between EmE and nutritional status were observed in women, particularly in never dieters (BMI: slope = 2.607, 95% CI: 2.434-2.779, overweight: OR = 5.06, 95% CI: 4.24-6.05).

**Conclusion:** These observations support the existence of an association between EmE and nutritional status. The effect modification of gender and dieting on EmE score and on the association of EmE score with nutritional status should be taken into account in obesity prevention.

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T3T4:OS5.3

**Stress, Cortisol and Central Obesity in Middle Aged Adults***Lasikiewicz N<sup>1,2</sup>, Hendrickx H<sup>3</sup>, Talbot D<sup>3</sup>, Dye L<sup>2</sup>*

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**Introduction:** Obesity is associated with various psychological and physiological disturbances. Of interest is the relationship between central obesity and psychological stress. Central obesity is characterised by increased adipose tissue, often associated with glucocorticoid excess, specifically, the stress hormone cortisol. Consequently, a disturbed cortisol basal diurnal rhythm and impaired responses to psychological stress in middle aged adults with central obesity may be observed.

**Method:** In study one, basal diurnal cortisol profiles were examined ( $n=147$ ; mean =  $46.21 \pm 7.18$  years) in a sample of high and low waist-hip ratio (WHR) males and females. Profiles were explored in terms of the area under the curve (AUC) of the cortisol-awakening response and diurnal decline. In study two, cortisol responses to a psychological stressor versus no-stress control ( $n=66$ ; mean =  $46 \pm 7.17$  years) in a sample of high and low WHR individuals were explored.

**Results:** Blunted cortisol profiles, characterised by a reduced AUC, were observed in the majority (78%) of a middle-aged sample and were associated with significantly greater WHR. Further, blunted cortisol profiles were associated with a less favourable metabolic profile. When exposed to a psychological stressor, high WHR individuals, specifically males, tended to secrete greater cortisol.

**Conclusion:** The findings suggest that central obesity is associated with altered cortisol responsivity. This highlights the vulnerability of high WHR individuals to stress related illness and disease. Further research, however, is required to elucidate whether stress exposure increases the propensity for central obesity or whether central obesity elevates stress responsivity.

T3T4:OS5.4

**Parental feeding behaviour and children's emotional eating: The moderating role of parental rejection***Vandewalle J, Moens E, Braet C*

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**Introduction:** Parental feeding behaviour has been widely studied and associated with the development of overweight in children. More specific, parental feeding behaviour has been associated with the eating style of the child, such as emotional eating. In addition, researchers found evidence that the quality of the general emotional climate of parent-child interactions can influence the strength of this association. The aim of this study is to test if the association between the feeding behaviour of the parents and the emotional eating of the child is moderated by parental rejection towards the child.

**Methods:** We included overweight youngsters between the age of 10 and 16 ( $N = 100$ ), who were seeking treatment. During a first visit at the treatment centre, youngsters and their primary caregiver were asked to fill in questionnaires about children's eating behaviour, parental feeding behaviour and parental rejection.

**Results:** Analyses show an interaction between parental responsive feeding behaviour and parental rejection. When parental rejection is low, parental responsive feeding behaviour is negatively correlated with the child's emotional eating. When parental rejection is high, parental responsive feeding behaviour is positively correlated with the child's emotional eating.

**Conclusions:** The results suggest that the emotional climate in which the feeding interactions between parent and child take place, influences the effect that these feeding interactions have on the emotional eating of the child. Surprisingly, when parents are generally dismissive of their children, the involvement shown regarding the food intake of the child can inadvertently facilitate the emotional eating of the child.

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T3T4:OS5.5

**Higher odds of depressive symptomatology associated with obesity risk in Australian adolescents***Millar LM<sup>1</sup>, Hoare E<sup>1</sup>, Skouteris H<sup>2</sup>, Fuller-Tyszkiewicz M<sup>2</sup>, Nichols M<sup>1</sup>, Jacka F<sup>1</sup>, Chikwendu C<sup>3</sup>, Terry J<sup>3</sup>, Allender S<sup>1</sup>*

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**Introduction:** Depression and obesity are both significant health concerns among adolescents. This study examined the associations between overweight/ obesity, key obesogenic risk factors (physical inactivity, sedentary behaviour, diet) and depressive symptomatology in an Australian adolescent population.

**Methods:** Baseline evaluation data from a community-based obesity prevention project in the Australian Capital Territory were used. In 2012, 800 students (440 females, 360 males) aged 11-14 years, from six secondary schools, completed a questionnaire that assessed physical activity, sedentary behaviour and dietary intake. Weight status was defined by WHO BMI z-score criteria. The Short Mood and Feelings Questionnaire (SMFQ) was completed and a cut-off score  $\geq 10$  indicated symptomatic depression. Logistic regression models were developed to estimate odds ratios for depressive symptomatology.

**Results:** Among the sample, 27% were overweight/obese and 25% reported depressive symptomatology. After controlling for potential